

Addressing Home Energy Affordability: Washington State

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Three major topics today

- An important overview: defining your objective.
- Setting a single affordability burden (or allowing multiple burdens).
 - Subsumed: statewide program or utility-specific programs.
- The inherent limits, and remaining usefulness, of increasing income eligibility.

Overview: Articulate the Objective

In noting that “affordability” is the objective, remember that pursuing affordability, and thus offering a low-income discount, is a means to an end, not an end unto itself. The outcome which stakeholders should seek to achieve through a universal service program is the ability of income-challenged customers to take utility service under sustainable conditions.

A reduced bill offered to low-income customers is not simply a distribution of financial benefits to the poor because they are poor. Instead, a properly designed discounted rate should be a mechanism through which utilities, in effect, seek to purchase an increase in the ability of low-income customers to consume their utility service while making consistent, timely payments for that service with a minimum of collection intervention.

Pennsylvania low-income objective:

Pennsylvania PUC Staff Report (January 2019):

“The Competition Acts define “universal service and energy conservation” as the policies, practices, and services that help low-income customers maintain utility service. . . [T]he universal service provisions of the Competition Acts tie the affordability of electric and natural gas service to a customer’s ability to maintain utility service. . .”

An alternative: New York's affordability

New York sets an affordable home energy burden at six percent of income. (Staff Report, at 84). The New York Commission firmly rooted its decision in social considerations:

“There is no universal measure of energy affordability; however, a widely accepted principle is that total shelter costs should not exceed 30% of income. For example, this percentage is often used by lenders to determine affordability of mortgage payments. It is further reasonable to expect that utility costs should not exceed 20% of shelter costs, leading to the conclusion that an affordable energy burden should be at or below 6% of household income.”

New York PSC Order Adopting Low Income Program Modifications and Directing Utility Filings at 3, Case 14-M-0565 (effective May 20, 2016).

Setting an affordable burden #1: New Jersey's 6% (50%/50% split)

Distribution of Effective Coverage Rate by Net Energy Burden (New Jersey) (gas or electric: 3%)				
	Coverage Rate			
Burden	< 50%	50% - <90%	90% - <100%	100% or more
<2%	0.0%	2.7%	5.3%	92.0%
2% - 3%	0.0%	6.0%	11.5%	82.5%
3% - 4%	0.0%	10.0%	13.2%	76.9%
4% - 6%	0.0%	11.6%	16.6%	71.6%
6% - 8%	0.4%	16.6%	17.4%	65.6%
More than 8%	1.0%	25.6%	16.1%	57.4%

Setting an affordable burden #2: New Jersey's 6% (50%/50% split)

Distribution of Effective Coverage Rate by Net Energy Burden (New Jersey) (combination gas/electric: 6%)				
	Coverage Rate			
Burden	< 50%	50% - <90%	90% - <100%	100% or more
<4%	0.0%	9.0%	12.2%	78.8%
4% - 6%	0.7%	19.7%	17.2%	62.4%
6% - 8%	0.7%	18.9%	18.5%	58.8%
8% - 12%	1.8%	21.4%	21.7%	56.1%
More than 12%	3.8%	31.1%	21.8%	43.2%

Over- and Under-Payment: Philly Water

(City avg bill and income) / (21% flat discount) (4% affordability)

	Avg HH Income	Avg HH Water Bill	Bill at 4% of Income	Dollar Discount Needed	Dollar Discount Using City	Over-(under-) payment
Total Philly	\$13,066	\$665	\$523	\$142	---	---
Far Northeast	\$15,089	\$712	\$604	\$108	\$152	\$44
Near NE-West	\$8,600	\$817	\$344	\$473	\$174	(\$299)
North	\$5,980	\$778	\$239	\$539	\$166	(\$373)
East	\$10,342	\$478	\$414	\$64	\$102	\$38
Northwest	\$16,840	\$643	\$674	(\$31)	\$137	\$168
Central	\$8,889	\$837	\$356	\$481	\$179	(\$302)
West	\$11,052	\$658	\$442	\$216	\$141	(\$75)
Center City	\$17,465	\$655	\$699	(\$44)	\$140	\$184
Southwest	\$17,015	\$568	\$681	(\$113)	\$121	\$234
Southeast	\$18,176	\$737	\$727	\$10	\$157	\$147

Depth of Unaffordability: Status Quo and FCO by Tier and Heating/Non-heating Status

Tier	Non-Heating				Heating			
	Percent Unaffordable		Mean \$s Above Affordable		Percent Unaffordable		Mean \$s Above Affordable	
	Status Quo	FCO	Status Quo	FCO	Status Quo	FCO	Status Quo	FCO
B	85%	99%	\$383	\$215	83%	98%	\$594	\$384
C	52%	88%	\$483	\$117	43%	75%	\$757	\$184
D	36%	43%	\$472	\$75	23%	21%	\$595	\$107
D1	27%	27%	\$443	\$64	17%	9%	\$660	\$125
E	19%	5%	\$489	\$76	11%	2%	\$722	\$96
E1	16%	3%	\$492	\$80	4%	1%	\$921	\$193
Total	35%	39%	\$447	\$124	25%	26%	\$652	\$253

SOURCE: Appendix C, PECO Options Report, Docket No. M-2012-2290911. (FCO = Fixed Credit Option).

Total Dollars of Unaffordable Bills (PECO)

Non-Heating

	Status Quo Alternative					FCO Alternative				Ratio: FCO to Status Quo Total Unaffordable
Income Tier	# of Participants	Pct Unaffordable	Avg Unaffordable Bill	Total Unaffordable Dollars		# of Participants	Pct Unaffordable	Avg Unaffordable Bill	Total Unaffordable Dollars	
B	9,809	85%	\$383	\$3,193,320		9,809	99%	\$215	\$2,087,846	65%
C	17,462	52%	\$483	\$4,385,756		17,462	88%	\$117	\$1,797,888	41%
D	25,261	36%	\$472	\$4,292,349		25,261	43%	\$75	\$814,667	19%
D1	33,313	27%	\$443	\$3,984,568		33,313	27%	\$64	\$575,649	14%
E	23,056	19%	\$489	\$2,142,133		23,056	5%	\$76	\$87,613	4%
E1	18,478	16%	\$492	\$1,454,588		18,478	3%	\$80	\$44,347	3%
Total	xxx	35%	\$447	xxx		xxx	39%	\$124	xxx	
Sum				\$19,452,714					\$5,408,009	28%

Pennsylvania PUC: New Maximum Energy Burden Thresholds (09-19-19) (Docket M-2019-3012599)

Utility Service Type	0-50% FPIG	51-100% FPIG	101-150% FPIG
Electric Non-Heat	2%	4%	4%
Gas Heat	4%	6%	6%
Electric Heat	6%	10%	10%

The limits of a single percentage (and the dangers of inter-state comparisons)

- New Jersey (Ohio):
 - “Net energy burden” (i.e., after LIHEAP)
- Illinois:
 - Monthly maximum (\$150)
 - Annual maximum (\$1,800)
- Pennsylvania:
 - New burdens are maximums (not absolutes) (affordability a range and not a point).
 - Burden calculated BEFORE LIHEAP.
 - Minimum charge
 - Maximum annual CAP credit ceilings (varies by utility)
 - Fixed Credit Option (PECO)
 - Includes all fees (e.g., late payment charge, reconnect fee)
 - Adjust bill as a percentage of income intra-year

Modifying a single affordability percentage

- Some people receive a benefit of \$0. If not. . .
- Tiered percentage by Poverty Level
 - Ohio, New Jersey, Illinois: single percentage
 - Pennsylvania: tiered percentage by Poverty
- Fixed Credit Option
 - PECO: Constant credit, not constant payment.
- Split between heating and non-heating:
 - New Jersey: 6%: (3%/3% heating and non-heating)
 - Illinois: 6% (4% / 2% heating and non-heating)
 - Pennsylvania: Tiered ranges

The Inherent Limits of Increasing Income Eligibility

Affordable Bills at Increasing Income-Eligibility Ranges			
	Electric (non-heating)	Electric (heating)	All Electric
<u>3-person HH income</u>			
150% Poverty	\$31,170	\$31,170	\$31,170
175% Poverty	\$36,375	\$36,375	\$36,375
200% Poverty	\$41,560	\$41,560	\$41,560
<u>Maximum Burden</u>			
150% of Poverty	2%	4%	6%
<u>Affordable Bill (maximum burden x HH income)</u>			
150% Poverty	\$623.40	\$1,246.80	\$1,870.20
175% Poverty	\$727.50	\$1,455.00	\$2,182.50
200% Poverty	\$831.20	\$1,662.40	\$2,493.60

The Role of Increased Income Eligibility

- Emergency assistance (role of income fragility not merely income level).
- Weatherization (question is of overcoming market barriers, not of unaffordable burdens).
- Arrearage management (tie to regular payment of Budget Bill).
- Extreme weather protections (not based on burdens –affordable burdens are annual, not seasonal in any event).

The fundamental components of “energy assistance.”

- Income-based bills tied to affordable burden.
- Arrearage management.
- Crisis assistance.
- Weatherization (usage reduction).

Appendix



**Percentage of Income Burdens and the Factors that Affect where such Burdens are Established
In Ratepayer-funded Bill Payment Assistance Programs**

State	Uniform program type?	Program type	Heating payment burden	Non-heating payment burden	Tiered by income or not?	Bill reduced by LIHEAP?	Limit on annual benefits?	Limit on total annual program costs?	Limit on cost per ratepayer?	Who pays?
Maine	Individual within design constraints	Varied by utility	<75% FPL: 7.1% 75 – 150% FPL: 12.1%	<75%: 6% 75 – 150% FPL: 11.1%	Yes	Yes	Benefits < \$50 not paid. Benefit cap of \$1,800.	Roughly 0.5% of total jurisdictional revenues	No	All ratepayers
New Hampshire	Single statewide program	Tiered discount	4 – 5% (achieved by applying tiered percentage of bill discounts on first 750 kWh of usage)		Yes	No (electric-only program)	No	Implied by the cap on the charge used to generate the subsidy fund.	Yes (single charge to support LI assistance and energy conservation)	All ratepayers
New Jersey	Single statewide program	PIPP	3%: electric and gas standing alone. 6%: all electric		No	Yes	\$1,800 per year.	No	No	All ratepayers
Ohio	Single statewide program	PIPP	6% or \$10 (lesser): gas and electric standing alone. 10% or \$10 (lesser): all electric		No	No (LIHEAP applied to arrearages)	Yes	No	No	All ratepayers
Illinois	Single statewide program	PIPP	3%: electric and gas standing alone. 6%: all electric		No	Yes	\$1,800	Implied by the cap on the charge used to generate the subsidy fund.	Yes	All ratepayers
Colorado	Individual within state constraints	Varied by utility	Xcel: 3% gas and electric standing alone; 6% all electric SourceGas: <75% FPL: 2%; 75 – 125% FPL: 2.5%; 125%+: 3%		Some utilities but not all	Yes	No	Annual budget presented to CPUC for approval	Yes	All ratepayers
Nevada	Single statewide program	PIPP	Reduce individual household burden to not more than percentage of income paid at state median income (calculated annually)		Per household benefit tiered by income and by household size	LIHEAP added to ratepayer funds to comprise benefit	Yes	Implied by the cap on the charge used to generate the subsidy fund.	Yes	All retail customers

Recommended Reading:

Cromwell, Colton, Rubin & Herrick
(January 2010)

*Best Practices in
Customer Payment Assistance Programs*

Water Research Foundation
(American Water Works Association)